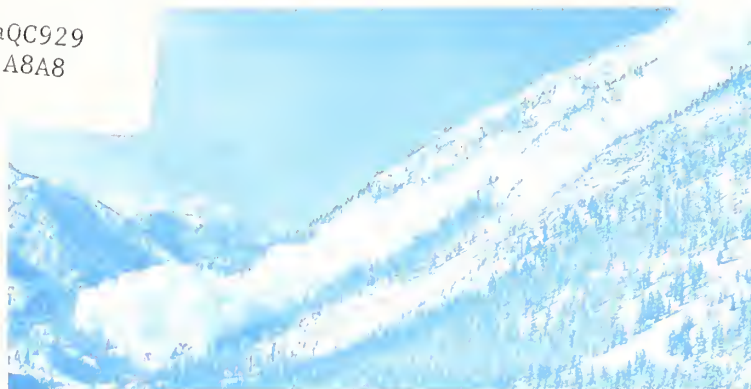


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Avalanche Notes

U.S. Forest Service
Westwide Avalanche Network

November 1990

The first lasting snows in the northern Rockies came right on schedule in early October, followed by an extended Indian summer. When November arrived it brought a thoroughly mixed weather bag to the West, as monthly snowfalls varied from about 50-170% of normal. Here are the regional summaries:

Much of Alaska experienced the coldest November of record. Though the snow cover was generally shallow, the cold led to an extra early sea ice and river ice pack. Alyeska, AK recorded only 40" of snowfall, but reported 10 nights of below zero temperatures, unusual for November.

The Cascades of Washington and Oregon established a lasting snow cover only above 5,000' elevation. At lower elevations, periodic rains wiped out any snowpack that tried to accumulate. The heaviest rains came on the 20th-27th when Crystal Mt. recorded 10.37" and Mt. Rainier-Paradise, 16.77". The precip gage at Alpental recorded 15.37" on the 22nd-25th. The result was devastating flooding in the lowlands of Washington on the weekend after Thanksgiving. For the month, Mt. Rainier recorded 94" of snow, or 97% of normal.

The Sierra of California were left high and dry as the jet stream stayed to the north all month. Alpine Meadows and Squaw Valley saw only three days of snowfall, and wound up with only 45% of normal snows.

The northern Rockies of Montana and Wyoming got near-normal snows, but the Wasatch of Utah did even better. Four good storms came through in November; the heaviest was on the 20th-21st when 26" fell at Snowbird and 31", at Solitude. Snowbird recorded 170% of average.

In Colorado, the northern mountains came up short on snowfall, while the central and southern mountains, boosted by a big storm in early November, were above normal. On the 2nd-7th, Monarch got 30" and Gothic and Wolf Creek both got 43". For the month, Wolf Creek recorded 120% of normal; Monarch, 118%; Gothic, 107%; Berthoud Pass, 66%; and Winter Park, 56%.

Nine avalanche incidents were reported in November; five involved ski patrollers. On the 22nd at Snowbird, a patroller was caught; on the 27th and 28th at Aspen Mt., CO, patrollers were caught; on the 28th at Wolf Creek, a patroller was shallowly and briefly buried without injury. Also on the 28th, two incidents occurred at Taos, NM: first, the snow safety director took a 60-foot ride before grabbing a tree to pull himself out; then a short time later, a skier broke a cornice block which triggered a slab avalanche which caught a skier below. This man was knocked over, lost his equipment, was carried 200' vertical, landed on a catwalk feet first, and was buried to his ears standing straight up.

A fatal avalanche incident -- the first of the season -- occurred on November 7 in the LaPlata Mountains of southwest Colorado. A 22-year-old man, skiing alone during extremely unstable conditions, traversed (on foot) the center of an avalanche slope, triggered an avalanche, and was buried under 2 feet of snow near the toe of the debris. Two days later, a rescue dog alerted on the burial spot and rescuers recovered his body. His skis were strapped to his pack, and one ski tip protruded slightly from the avalanche debris. Bad route selection and too much risk while skiing alone led to an easily preventable death.

On the 25th on Eagle Peak in Chugach State Park, AK, an avalanche swept two climbers off a ledge on which they were bivouaced. They survived this avalanche only to be hit by a second one while looking for lost gear. Then while downclimbing, they triggered a third slide, which they also survived. (So, any volunteers to climb with these guys?)

May - October 1990

On May 22, the body of a 24-year-old man was found in avalanche debris in Logan Canyon, UT. He had last been seen on November 25, 1989 when he left on a solo ski tour. A large storm buried any evidence of his route; thus he was missing all winter. The medical examiner ruled death by asphyxiation in an avalanche. This fatality brings the 1989-90 toll to 8. (Correct your April 1990 Avalanche Notes to show this.)

Doug Fesler reports of two summer avalanche incidents in Alaska: First, on June 2, a climber on the West Buttress of Denali was carried on short ride without injury. Second, on June 4, a serious accident occurred on Bowl Peak in Chugach State Park. A climber triggered a wet loose slide in a gully which carried him 2,000' and buried him with multiple broken bones and contusions. His partner downclimbed, found part of a pack sticking out of the snow, and uncovered the injured man. He then ran back to camp for emergency gear, and upon returning found the victim totally buried by a second avalanche; only a boot was visible. He again uncovered the victim, who seemed not to be further injured by the second slide. He recovered in the hospital.

The 1990 International Snow Science Workshop was held in Bigfork, MT on October 9-13. It was an outstanding meeting with 375 persons registered and 9 countries represented. Great job, Stan Bones!

NOVEMBER 1990

SNOWFALL

[illegible]

U.S. FOREST SERVICE
ALPINE SNOW AND AVALANCHE RESEARCH PROJECT
RM STATION FORT COLLINS, COLO.

NOVEMBER 1990
AVALANCHE SUMMARY

AREA	TOTAL		DATES OF		MAX IN ONE DAY NO.	DATE	NUMBER OF DAYS WITH		TYPE OF AVALANCHE				FRACTURE LINE HEIGHTS IN FEET		VERTICAL DESCENT IN FEET				AVALS ACROSS MAJOR ACCESS ROADS NO.	
	A V A L S	THIS MONTH NO.	F I R S T	L A S T			A V A L S	S L U D G E	A R T I F I C I A L	N A T U R A L	S L A B S	H A R D	S O F T	W E T	L O O S E	GE 200	GE 500	GE 1000		MAX FEET
CENTRAL AND SOUTHERN ROCKY MOUNTAINS																				
ASPEN HIGHLANDS, COL	2	2	7	9	1	9+	2	2	0	0	0	0	0	0	2	1	0	0	600	0
ASPEN MOUNTAIN, COLO	3	3	27	28	1	28	2	2	0	0	0	0	0	0	2	1	0	0	300	0
BERTHOUD PASS, COLO	1	1	12	12	1	12	1	1	0	0	0	0	0	0	1	0	0	0	175	0
BERTHOUD PASS, U.S.-40	17	17	12	30	19	26+	2	2	0	0	0	0	0	0	1	1	1	1	900	0
COPPER MT, COLO	5	5	15	23	5	23	2	2	0	0	0	0	0	0	1	1	1	1	300	0
GOTHIC, COLO	1	1	23	23	1	23	2	2	0	0	0	0	0	0	1	1	1	1	675	0
GONARCO, COLORADO, CO	2	2	23	28	2	28	2	2	0	0	0	0	0	0	1	1	1	1	300	0
STEAMBOAT SPRINGS, CO	18	18	23	28	12	28	2	2	0	0	0	0	0	0	1	1	1	1	600	0
TAOS, NEW MEXICO	19	19	23	28	12	28	2	2	0	0	0	0	0	0	1	1	1	1	300	0
WOLF CREEK, COLO																				
INTERMOUNTAIN																				
SNOWBIRD	26	26													2	1	0	0	900	0
WEST COAST															2	1	0	0	900	0
ALYESKA, ALASKA	2	2	19	26	2	26+	0	0	1	0	0	0	0	0	1	1	0	0	900	0
CRYSTAL MTN, WASH	18	18	30	30	1	30	0	0	1	0	0	0	0	0	1	1	0	0	900	0
MT. HOOD MEADOWS	28	28	22	30	5	30	0	0	1	0	0	0	0	0	1	1	0	0	550	0

---DATA INCOMPLETE OR MISSING
GE=GREATER THAN OR EQUAL TO
+=ALSO OCCURRED ON OTHER DATES

TOTAL AVALANCHES REPORTED		DAMAGE SUMMARY - THIS WINTER			
AREA	THIS MONTH WINTER	PEOPLE	VEHICLES	AVALANCHE DAMAGED	
		C	B	BLOGS	LIFTS MISC
CENTRAL AND SO. ROCKIES	71	5	0	0	0
INTERMOUNTAIN	26	0	0	0	0
WEST COAST	48	0	0	0	0
ALL AREAS	145	5	2	0	0